

removing L LSB bits from the modified filtered signal to produce a dithered, filtered signal, where L is a selected positive number satisfying $L+1 \leq M$.

2. The method of claim 1, further comprising choosing said integer $M = 30$.
3. The method of claim 1, further comprising choosing said integer $N = 16$.
4. The method of claim 1, further comprising choosing said integer L in a range $1 \leq L \leq 16$.
5. The method of claim 1, further comprising providing said filtered signal as an FIR-filtered signal.
6. A system for adjusting a noise floor of a filtered signal for low frequencies, the system comprising a computer that is programmed:
 - to provide a digital signal, having M bits, that has been digitally filtered, where M is a selected positive number;
 - to form an EXclusive OR product of N LSB bits of the M-bit filtered signal, to provide a one-bit supplement signal, where N is a selected positive number satisfying $N+1 \leq M$;
 - to add the supplement signal to the M-bit filtered signal to produce a modified filtered signal; and
 - to remove L LSB bits from the modified filtered signal to produce a dithered, filtered signal, where L is a selected positive number satisfying $L+1 \leq M$.
7. The system of claim 6, wherein said computer is further programmed to choose said integer $M = 30$.
8. The system of claim 6, wherein said computer is further programmed to choose said integer $N = 16$.

9. The system of claim 6, wherein said computer is further programmed to choose said integer L to lie in a range $1 \leq L \leq 16$.

10. The system of claim 6, wherein said computer is further programmed to provide said filtered signal as an FIR-filtered signal.

11. An article of manufacture comprising:

a computer usable medium having computer readable program code means embodied in the medium;

computer readable program code means for causing a computer to provide a digital signal, having M bits, that has been digitally filtered, where M is a selected positive number;

computer readable program code means for causing a computer to form an EXclusive OR product of N LSB bits of the M -bit filtered signal, to provide a one-bit supplement signal, where N is a selected positive number satisfying $N+1 \leq M$;

computer readable program code means for causing a computer to add the supplement signal to the M -bit filtered signal to produce a modified filtered signal; and

computer readable program code means for causing a computer to remove L LSB bits from the modified filtered signal to produce a dithered, filtered signal, where L is a selected positive number satisfying $L+1 \leq M$.

12. The article of manufacture of claim 11, wherein at least one of said computer readable program code means chooses said integer $M = 30$.

13. The article of manufacture of claim 11, wherein at least one of said computer readable program code means chooses said integer $N = 16$.

14. The article of manufacture of claim 11, wherein at least one of said computer readable program code means chooses said integer L in a range $1 \leq L \leq 16$.

15. The article of manufacture of claim 11, wherein at least one of said computer readable program code means provides said filtered signal as an FIR-filtered signal.